



## Silicone Jewelry Molding Rubber

- Castaldo<sup>®</sup> silicone jewelry molding rubbers produce waxes with an extremely smooth high shine finish that won't stick to the mold. Smooth shiny waxes means faster cleaning and less polishing of finished castings.
- Wax patterns release from the rubber easily without the use of messy powders or silicone sprays.
- Molds cut "like butter" yet resist tearing. Castaldo silicone jewelry molding rubbers make complex molds that are stronger than any other silicone molding rubber on the market. Molds last and last!
- Castaldo silicone molding rubbers will not discolor silver models.
- High thermal conductivity means that waxes cool more quickly, increasing the number of wax patterns that can be made per hour.
- Castaldo silicone jewelry molding rubbers make molds that are ideal for vacuum wax injectors because they seal between injections almost as if they had never been cut. A better vacuum is created for better flow and fill.
- Excellent return to shape, or "memory".

All Castaldo<sup>®</sup> Silicone Jewelry Molding Rubbers make superior quality molds that are tough, strong, easy to pack, easy to cut and easy to use. Just spread the rubber and press it with your fingers like clay or putty!

Castaldo jewelry molding rubbers are available in the following types:

Castaldo Super High Strength<sup>tm</sup> Item #800 A superior quality medium hardness jewelry molding rubber with extreme tear and tensile strength for every application including spirals, cores, cut-outs & plugs as well as for general purpose use. Can be used with Econosil® on the outside for additional stiffness or on the inside for additional dimension stability.

Shore A hardness 38 – 40. Vulcanizes at 165° – 176° C / 330° – 350° F. Medium shrinkage - 2.3%. Color: traditional tan.

Tensile strength: 8.3 n/mm<sup>2</sup> / 1204 psi Tear strength: 21.2 n/mm / 121 lbs./ in. Elongation: 667%

Castaldo Econosil® Item #808 Harder, economy grade jewelry molding rubber that still produces top quality molds with long use life. Suitable for every application including spirals, cores, cut outs & plugs as well as general purpose. Econosil® offers less flexibility for better dimensional stability – less ballooning during injection, less constriction during clamping & less internal distortion of small, delicate details. Excellent for flat and simple pieces, filigree or other thin channels. Also excellent for pieces where high precision and consistent weight is required. Can be combined with Super High Strength<sup>tm</sup> rubber as an insert to add

Shore A hardness 48 – 50. Vulcanizes at 165° –1 76° C / 330°- 350° F . Tear strength: 19.4 n/mm / 111 lbs./ in. Low shrinkage – 1.1%. Color: brick red/brown.

stiffness and hardness in pattern area.

Tensile strength: 6.2 n/mm<sup>2</sup> / 897 psi Elongation: 555%

Castaldo VLT® Item #809 Very low temperature, very low shrinkage, jewelry molding rubber is tough, strong and similar to Castaldo Super High Strength<sup>tm</sup> but is specially designed for use with CAD-CAM, RP & SL wax and resin models as well as traditional metal models.

Shore A hardness 38 - 40. Vulcanizes at 71°C - 88°C / 160°F - 190°F Very low shrinkage - only 0.1%

Tensile strength: 8.9 n/mm<sup>2</sup> / 1289 psi Tear strength: 18.2 n/mm / 104 lbs./ in. Elongation: 614%

Castaldo Rapido<sup>®</sup> Item #810 Tough, strong with very low shrinkage and similar to Castaldo Super High Strength<sup>tm</sup> rubber jewelry molding but cures FAST! Finished molds are ready in only 15 minutes when vulcanized at 93° C /200° F.

Shore A hardness 38 - 40 Very low shrinkage - only 0.1%. Color: marigold.

Tensile strength: 8.9 n/mm<sup>2</sup> / 1289 psi Tear strength: 18.2 n/mm / 104 lbs./ in. Elongation: 614%

Castaldo Super Stretch<sup>tm</sup> Item #811 Similar to Super High Strength<sup>tm</sup> jewelry molding rubber but softer for extreme pliability, flexibility and elasticity when needed for delicate models and extreme undercuts. Best used as insert in Super High Strength<sup>tm</sup> or Econosil<sup>®</sup> jewelry molding rubber.

Shore A hardness 28 - 30. Vulcanizes at 165° – 176° C / 330° – 350° F. Low shrinkage 1.3%. Color: violet

Tensile strength: 7.7 n/mm<sup>2</sup> / 1109 psi Tear strength: 19.2 n/mm / 110 lbs./ in. Elongation: 900%







## **Silicone Jewelry Molding Rubber**

## **Quick Comparison Chart**

| Туре                             | Super High                          | Econosil®   | VLT®   | Rapido <sup>®</sup>               | Super Stretch <sup>tm</sup>                          |
|----------------------------------|-------------------------------------|---|--|-----------------------------------|--|
|                                  | Strength <sup>tm</sup><br>Item #800 | Item #808   | Item #809  | Item #810                         | item #811  |
| Color                            | Tan                                 | Brick red / brown   | Blue green / Teal  | Marigold                          | Violet   |
| Hardness                         | 38 - 40                             | 48 - 50   | 38 - 40  | 38 - 40                           | 28 - 30  |
| Vulcanization<br>Temperature     | 165° – 176° C<br>330° – 350° F      | 165° – 176° C<br>30° – 350° F   | 71° – 88° C<br>160° – 190° F                             | 93° C<br>200° F                   | 165° – 176° C<br>330° – 350° F                       |
| Uses                             | High Strength General<br>Purpose.   | Economy grade.<br>Firm molds, filigree &<br>thin channels. High<br>precision. | Low temperature<br>for resin CAD-CAM, RP<br>& SL models. | Fast 15 minute molds.             | Elastic inserts, extreme undercuts, cores and plugs. |
| Shrinkage                        | Medium - 2.3%                       | Low - 1.1%  | Very Low - 0.1%  | Very Low - 0.1%                   | Low - 1.3%   |
| Tensile Strength<br>before break | 8.3 n/mm <sup>2</sup><br>1204 psi   | 6.2 n/mm <sup>2</sup><br>897 psi  | 8.9 n/mm <sup>2</sup><br>1289 psi                        | 8.9 n/mm <sup>2</sup><br>1289 psi | 7.7 n/mm <sup>2</sup><br>1109 psi                    |
| Tear Strength<br>before break    | 21.2 n/mm<br>121 lbs./ in           | 19.4 n/mm<br>111 lbs./ in   | 18.2 n/mm<br>104 lbs./ in                                | 18.2 n/mm<br>104 lbs./ in         | 19.2 n/mm<br>110 lbs./ in                            |
| Elongation<br>before break       | 667%                                | 555%  | 614%   | 614%                              | 900%   |

Castaldo silicone jewelry molding rubber compounds are available in two sizes: STRIPS 7.3 cm x 45.7 cm x approx. 6 mm (1  $^{7}/8$ th" x 2  $^{7}/8$ " x approx.  $^{3}/8$ ") Coming soon - SQUARES 30 mm x 30 mm x approx. 6 mm (11¾" x 11¾" x approx.  $^{3}/8$ th")

CASTALDO Jewelry Silicone Molding Rubber is made to exacting specifications in our modern processing plant. Ingredients for each batch are carefully weighed and tested before mixing. The finished compound is then calendered into sheets and cut to finished sizes.



